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human CAP-1

60  
MLSHNTMMKQRKQQAATAIMKEVHGNDVDGMDLGKKVSIIPRDIMLEELSHLSNRGARLFKM  
120  
RQRRSDKYTFENFQYQSRAQINHSIAMQNGKVDGSNLEGGSQQAPLTPPNTPDPRSPNP  
180  
DNIAPGYSGPLKEIPPEKFNNTAVPKYYQSPWEQAISNDPELLEALYPKLFKPEGKAEPL  
240  
DYRSFNRVATPFGGFEEKASRMVKFKVPDFELLLLTDPFRFMSFVNPLSGRRSFNRTPKGWI  
SENIPVITTEPTDDTTVPESDL

FIG. 1A

mouse CAP-1

60  
MLSHSAMVKQRKQQAASAITKEIHGHDVDGMDLGKKVSIIPRDIMIEELSHFSNRGARLFKM  
120  
RQRRSDKYTFENFQYESRAQINHNIAMQNGRVDGSNLEGGSQQGPSTPPNTPDPRSPNP  
180  
ENIAPGYSGPLKEIPPERFNNTAVPKYYRSPWEQAIGSDPELLEALYPKLFKPEGKAEIR  
240  
DYRSFNRVATPFGGFEEKASKMVKFKVPDFELLLLTDPFRFLAFANPLSGRRCFNRAPKGWV  
SENIPVVITTEPTEDATVPESDDL

FIG. 1B

human CAP-2

60  
MPLSGTPAPNKKRKSSKLIMELTGGQESSGLNLGKKISVPRDVMLEELSLLTNRGSKMF  
120  
KLRQMRVEKFIYENHPDVFSDDSSMDHFQKFLPTVGGQLGTAGQGFYSKSNRGGSQAGG  
180  
SGSAGQYGSDQQHHLGSGSGAGGTGGPAGQAGRGGAAGTAGVGETGSGDQAGGEGKHITV  
240  
FKTYISPWERAMGVDPQQKMEIGIDLLAYGAKAELPKYKSFNRTAMPYGGYEKASKRMTF  
QMPKFDLGPLLSEPLVLYNQNLNRPSPFNRTPIPWSSGEPVDYNVDIGIPLDGETEEL

FIG. 1C

mouse CAP-2

60  
MPLSGTPAPNKKRKSSKLIMELTGGGRESSGLNLGKKISVPRDVMLEELSLLTNRGSKMF  
120  
KLRQMRVEKFIYENHPDVFSDDSSMDHFQKFLPTVGGQLETAGQGFSYKGSSGGQAGSSG  
180  
SAGQYGSDRHQQSGFGAGSGGPGGQAGGGGAPGTVGLGEPGSGDQAGDGKHVTVFKT  
240  
YISPWDAMGVDPQQKVELGIDLLAYGAKAELPKYKSFNRTAMPYGGYEKASKRMTFQMP  
KFDLGPLLSEPLVLYNQNLNRPSPFNRTPIPWSSGGEHVDYNVDVIGIPLDGETEEL

FIG. 1D

[illegible]

10	20	30	40	50	60	70	80	90	100
GTCCACAGTTTCAGGATAAAAAACCATCAGGCCCAAGTGCCATCCATAGTCTCCATCCCAAACTGGGATTCATCCCGCTGAAAAAG									
CAGGGTCCAAAGTTCCTATTTTTGGTAGTCCGGGTTCCAGCGTAGGTATCAGGTAGAGGTCCTCAGAAGGAGGTGTTTGACCTTAAGTAGGGGCGACTTTTTC									
110	120	130	140	150	160	170	180	190	200
CACAATCTAACCAAGCAAGGGAACAAAAAACCATGCTATCACAATAATCATATGATGAAGCGAGAGAAAAACGACCAAGCCCATCATGAAGGAAGTCAAT									
GTGTTAGATTGCTGCTTCCCTTGTTTTTTGGTAGCATAGTGTAATATGATACTACTCTGCTCTTTTGTCTGCTTGTGTCGGTAGTACTTCTCTCAGTA									
210	220	230	240	250	260	270	280	290	300
GGAAATGATGTTGATGGCATGGACCTGGGGCAAAAAAGGTCCAGCATCCCCAGGACATCATGTTGGAAGAATTAATCCCATCTCAGTAACCGGTGGTCCGAGG									
CCTTTACCAACTACCGTACTCGGACCGTTTTTCAGTCTGATGGGTCCTGTAGTACAACCTTCTTAATAGGGTAGAGTCATTGGCAGCACCGGCTCG									
310	320	330	340	350	360	370	380	390	400
TATTTAAGATTCGCTCAAAAGAAATCTGACAAATACACATTTGAAAAATTTCCAGTATCAATCTAGAGCACAAAATAATCTACAGATTGCTATGCGAAGT									
ATAAAATCTACCGAGTTTCTTCTAGACTGTTTATGTGTAACACTTTTAAAGGTCATAGTTAGACTCGTGTGTTATTTAGTGTCATAAGCATACGCTTTAC									
410	420	430	440	450	460	470	480	490	500
GAAAGTGGATGGAAGTAACTTGGAAGGTGGTTCGCAGCAAGCCCGCTTGACTCTCCCAACACCCCGAGATCCACGAAGCCGCTCAAATCCAGACAACAT									
CTTTCACCTACCTTCATTAACCTTCACCAAGCGCTGTTCCGGGGAACTGAGGAGGCTGTGGGGCTTAGTGCTTCGGGAGGTTTAGGTCTGTTGTAA									
510	520	530	540	550	560	570	580	590	600
GCTCCAGGATATTCTGGACCACTGAAGGAAATTCCTCTGAAAAATTTCAACACCAACAGCTGTCCCTAAGTACTATCAATCTCCCTGGGAGCAAGCCATTA									
CAGGGCTCTATAAGACTCGTGACTTCTTTAAGGAGGACTTTTAAAGTTGTGGTGTGCACAGGAGTTCATGATAGTTAGAGGAGCCCTGTTTCGGTAA									
610	620	630	640	650	660	670	680	690	700
GCAATGATCCGGAGCTTTTAGAGGCTTTATATCTTAAACTTTTCAAGCGCTGAAGGAAAGCGCAAGTCCCTGATTACAGAGGCTTTAAACAGGGTTGCCAC									
CGTTACTAGGCGCTCGAAATCTCCGAAATATAGGATTTGAAAAGTTGGCACTTCTTTCGCTTCACGGACTAATGCTCTCGAAATTTGCTCCCAACGGTG									
710	720	730	740	750	760	770	780	790	800
ACCATTTGGAGGTTTTGAAAAAGCATCAAGAAATGGTTAAATTTAAAGTTCAGGATTTTGAAGTCTTATGCTAACAGATCCCGAGTTTATGTCCTTTGTC									
TGGTAAACCTCCAAAACTTTTCTGTAGTCTTACCAATTTAAATTTCAAGGTCATAAACTCGATGATACGAATGCTCAGGGTCCAAATACAGGAAACAG									
810	820	830	840	850	860	870	880	890	900
AATCCCTTTCTGGGAGACGGTCTTTAATAGGACTCCTAAGGGATGGATATCTGAGAAATATTCCTATAGTGATAACACCGAACTACAGATGATACCA									
TTAGGGGAAGACCGCTCGCCAGGAAATATCTCGAGGATTCCTACTATAGACTCTTATAAGGATATCACTATTGTTGGCTTGGATGCTACTATGGT									
910	920	930	940	950	960	970	980	990	1000
CTGTACCAAGATCAGAGCACTATGAAAAGAAAGTTGTATGTGCCACATAAAACTCTGAAATATAAAAGTTGCTGCTCTACTATTTTAACTACTGCGAAAG									
GACATGCTCTTAGCTCTTCGATACCTTTCTCTTCAACATACACGGTGTATTTTGAGACTTATATTTTCAACGACAAGATGATAAAATGATGACCGTTTC									
1010	1020	1030	1040	1050	1060	1070	1080	1090	1100
CACTTGCAATTTTTCATTAGTAGCAACAAATAGCAATTTAGTGATTTCTCTTTCTGACATCTCAATTTCAATCTCAGATCAAAATACTATAAACAATTAGAA									
GTGAACGTAAAAAGTAATCTGTTGTTATCTGTTAAATCACTAAAAGGAAAAAGACTGTAAAGTTAAAGTTAGAGTCTAGTTTATGATTTTGTAACTCT									
1110	1120	1130	1140	1150	1160	1170	1180	1190	1200
ATCTTACTTAAAAAACTTATAACTCACTTGTCTTCAATCTAATAATTTTGTCTTCACTCGGTTTAAAGAAATCCAGATATTTTACTGCAAAAGTTTCAGATG									
TAGAATGAAATTTTTTGAATATTGAGTGAACAGAGTAAGTATTTAAACAAAAGTGAAACAAATTTCTTAGGCTATATAAAATGAGCTTTTCAAGCTAC									
1210	1220	1230	1240	1250	1260	1270	1280	1290	1300
AAAAGTAATTCAGACCTTCACCTTTGCTCAATTTATATGATTTATTACAGTGAAGTTTTCAGTGGAAATCTAGAAATCAAAATACAGGAGAGATATG									
TTTTCAITTAAGTGTGGAAGTGAAACAGAGTAAATATATCACTAAATATGTCACATTCAAAAGTCCAGCTTAGACTTTAGTTTATGTCCCTCTATAC									
1310	1320	1330	1340	1350	1360	1370	1380	1390	1400
AAACCTTATTCAGAGTTTCATCTGGGATGAAAGCTATGGAAGATGATGTACAATGTTTATGATGGAGAAATGGTTGGTGTGCTCTTCTCGTGACCA									
TTCTGGATAAGTCTCAAGTAGAGCCCTACTTTTGATAGCTCTTACTACTATGTTTACAACTAGCTCTTTTACCAACCCACAGCAAGCAAGCACTCGT									
1410	1420	1430	1440	1450	1460	1470	1480	1490	1500
TCAGAAAAATATATGCTTGTGATGAAGTCTTTTCAAT									

FIG. 2A

# mouse CAP-1

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10      20      30      40      50      60      70      80      90     100
ATTGGGCACATGGGATGGAGGGACCATGCCGTTCCAGGTTCAAGGATAAAACCCATTGGGCCATAGTGCCGTCATATCCACCTTCAGTGCCCTTCCTCCA
TAAGCCGTGTACCTAGCTCCCTGGTAGCGCAAGGTCCAAGTTCCTATTTTGGGTAACCCGGTATCACGGCAGTATAAGGTGGAAAGTACGGAAGGAGGT

110     120     130     140     150     160     170     180     190     200
CAATTGGGATTACCCCTGCTGAAAAGCGCAGCGTGACAGCAAGGCAACAAAAAATGCTATCACATAGTGCCATGGTGAAGCAAAAGCAACAGCAAG
GTTAAACCTTAAGTGGGAGGACTTTTCGGGTGGGACTGTCGTTCCCTTGTTTTTGATACGATAGTGATACAGGTAACCACTTCGTTTCCTTTGTCGTTTC

210     220     230     240     250     260     270     280     290     300
CATCAGGCATCACGAAGGAAATCCATGGACATGATGTTGACGGCATGGACCTGGGCAAAAAGTTAGCATCCCGAGAGACATCATGATAGAAGAAATTGTC
GTAGTCGGTAGTGCTTCCTTTAGGTACCTGTACTACAACTGCCGTACCTGGACCCGTTTTTCAATCGTAGGGGTCTCTGTAGTACTATCTTCTTAACAG

310     320     330     340     350     360     370     380     390     400
CCATTTCAGTAATCGTGGGGCAGGCTGTTTAAAGTGGTCAAAGAAGATCTGACAAATACACCTTTGAAAATTTCCAGTATGAATCTAGAGCACAAATT
GGTAAAGTCATTAGCACCCCGGTCCGACAAATTCACGCAGTTTCTTCTAGACTGTTTATGTGGAAACTTTTAAAGGTCACTACTTAGATCTCGTGTTTAA

410     420     430     440     450     460     470     480     490     500
AATCACAATATCGCCATGCCAGAAATGGGAGAGTTGATGGAAGCAACCTGGAAAGTGCGCTCACAGCAAGGCCCTCAACTCCGCCCAACACCCCGATCCAC
TTAGTGTTATAGCCGTACGTTCTTACCTCTCAACTACCTTCGTTGGACCTTCCACCGAGTGTCGTTCCGGGGAGTTGAGGGCGGTTGTGGGGGCTAGGTG

510     520     530     540     550     560     570     580     590     600
GAAGCCCCCAAAATCCAGAGAACAATGCCACCAAGGATATTCCTGGACCACTGAAGGAAATTCCTCCTGAAAGGTTTAAACAGACGGCCGTTCTTAACTACTA
CTTCGGGGGGTTTAGGTTCTTGTAGCGTGCTCTATAAGACCTGGTGACTTCCTTTAAGGAGGACTTTCCAAATTGTGCTGCCGGCAAGGATTCATGAT

610     620     630     640     650     660     670     680     690     700
CCGGTCTCCATGGGAGCAGGCGATTGGCAGCGATCCGGAGCTCTGGAGGCTTTGTACCCAAAATTTTCAAGCCTGAAGGAAAGCAGAACTCGGGGAT
GGCCAGAGGTACCTCGTCCGCTAACCGTCGCTAGGCCCTCGAGGACCTCCGAAACATGGGTTTTGAAAAGTTGGGACTTCCTTTTCGCTTGACGCCCTA

710     720     730     740     750     760     770     780     790     800
TACAGGAGCTTTAACAGGGTTGCCACTCCATTTGGAGGTTTTGAAAAGCATCAAAATGGTCAAATTCAAAGTTCAGATTTTGAACACTGCTGCTGA
ATGTCCTGAAATTTGTCCACGGTGAGGTAAACCTCCAAAATTTTCTGTAGTTTTTACCAGTTTAAAGTTTCAAGGTTCTAAATCTGATGACGACGACT

810     820     830     840     850     860     870     880     890     900
CAGATCCCAAGGTTCTGGCCTTTGCCAATCTCTTTGGGCGAGACGATGCTTTAACAGGGGGCCAAAGGGTGGGTATCTGAGAATATCCCGTCGTGAT
GTCTAGGGTCCAAGAACCGGAACGGTTAGGAGAAAGCCGCTCTGCTACGAAATGTGCCGCGGTTTCCCAACCCATAGACTCTTATAGGGGCAGCACTA

910     920     930     940     950     960     970
CACAACTGAGCCTACAGAAGAGCCCACTGTACCGGAATCAGATGACCTGTGAGAGGGGAAGCTGGGGATGCCACAGGAAGTTC
GTGTTGACTCGGATGCTTCTGCGGTGACATGGCCTTAGTCTACTGGACACTCTCCCTTCGACCCCTACGGTGTCTTCAAG

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FIG. 2B

## human CAP-2

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CGGTCAACAG AGCTCAGTCC TCCAAAGCTG CTGGACCCCA GGGAGAGCTG ACCACTGCCC GAGCAGCCGG CTGAATCCAC CTCCACAATG CCGCTCTCAG      100
GAACCCCGGC CCCTAATAAG AAGAGGAAT CCAGCAAGCT GATCATGGAA CTCACTGGAG GTGGACAGGA GAGCTCAGGC TTGAACCTGG GCAAAAAGAT      200
CAGTGTCCCA AGGGATGTGA TGTGGAGGA ACTGTGCTG CTTACCAACC GGGGCTCCAA GATGTTCAA CTGCGGCAGA TGAGGGTGA GAAGTTTATT      300
TATGAGAACC ACCCTGATGT TTTCTCTGAC AGCTCAATGG ATCACTTCCA GAAGTTCTT CCAACAGTGG GGGGACAGCT GGGCACAGCT GGTGAGGGAT      400
TCTCATACAG CAAGAGCAAC GGCAGAGGCG GCAGCCAGGC AGGGGGCAGT GGCTCTGCCG GACAGTATGG CTCTGATCAG CAGCACCATC TGGGCTCTGG      500
GTCTGGAGCT GGGGGTACAG GTGGTCCCGC GGGCCAGGCT GGCAGAGGAG GAGCTGCTGG CACACAGGGG GTTGGTGAGA CAGGATCAGG AGACCAGGCA      600
GGCGGAGAAG GAAAACATAT CACTGTGTTT AAGACCTATA TTTCCCATG GGAGCGAGCC ATGGGGGTTG ACCCCAGCA AAAAATGGAA CTTGGCATTG      700
ACCTGCTGGC CTATGGGGCC AAGCTGAAC TTCCCAATA TAAGTCTTC AACAGGACGG CAATGCCCTA TGGTGGATAT GAGAAGGCCT CCAACGCAT      800
GACCTCCAG ATGCCCAAGT TTGACCTGGG GGCCTGCTG AGTGAACCCC TGGTCTCTA CAACCAAAAC CTCTCCAACA GGCCTTCTTT CAATCGAACC      900
CCTATTCCCT GGCTGAGCTC TGGGGAGCCT GTAGACTACA ACCTGGATAT TGGCATCCCC TTGGATGGAG AAACAGAGGA GCTGTGAGGT GTTTCCTCCT      1000
CTGATTGCA TCATTTCCTC TCTGTGGCTC CAATTGGAG A

```

FIG. 2C

## mouse CAP-2

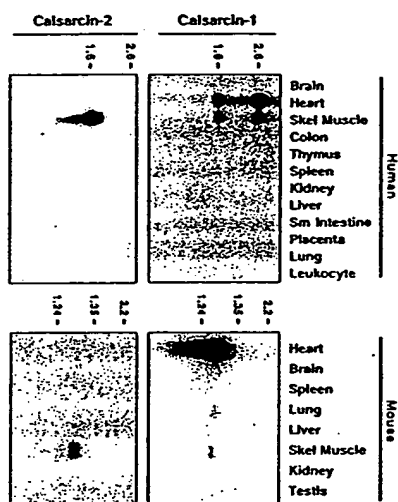
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100
GCCGGGGAGA GCGGACCACC AACTGAGCAG CTGGTCAGAT CCACCTCCAC CATGCCACGC TCAGGAACCC CGGCCCTAA CAAGAGGAGG AAGTCAAGCA
200
AACTGATTAT GGAGCTCACT GGAGGTGGCC GGGAGAGCTC AGGCCTGAAC CTGGCAAGA AGATCAGTGT CCCAAGGGAT GTGATGTTGG AGGAGCTGTC
300
CCTTCTTACC AACCGAGGCT CCAAGATGTT CAAGCTACGG CAGATGCGGG TGGAGAAATT TATCTATGAG AATCACCCCG ATGTTTTCTC TGACAGCTCA
400
ATGGATCACT TCCAGAAGTT TCTTCCACA GTGGGAGGAC AGCTGGAGAC AGCTGGTCAG GGCTTTCAT ATGGCAAGGG CAGCAGTGGG GGCCAGGCTG
500
GCAGCAGTGG CTCTGCTGGA CAGTATGGCT CTGACCGTCA TCAGCAGGGC TCTGGGTTTG GAGCTGGGGG TTCAGGTGGT CCTGGGGGCC AGGCTGGTGG
600
AGGAGGAGCT CCTGGCACAG TAGGGCTTGG AGAGCCCGGA TCAGGTGACC AGGCAGGTGG AGATGGAAAA CATGTCACTG TGTCAAGAC TTATATTTC
700
CCATGGGATC GGGCCATGGG GGTTGATCCT CAGCAAAAG TGGAACTGG CATTGAOCTA CTGGCATACG GTGCCAAAGC TGAAGTCCCC AAATATAAGT
800
CCTTCAACAG GACAGCAATG CCCTACGGTG GATATGAGAA GGCCTCCAAA CGCATGACCT TCCAGATGCC CAAGTTTGAC CTGGGGCCTC TGCTGAGTGA
900
ACCCCTGGTC CTCTACAACC AGAACCTCTC CAACAGGCCT TCTTCAATC GAACCCCTAT TCCCTGGTTG AGCTCTGGGG AGCATGTAGA CTACAAGTG
1000
GATGTTGGTA TCCCCTTGA TGGAGAGACA GAGGAGCTGT GAAGTGCCCT CTCTGTGAT GTGCATCATT TCCCTTCTCT GGTTCOAATT TGAGAGTGGA
1100
TGCTGGACAG GATGCCCCAA CTGTTAATCC AGTATTCTTG TGGCAATGGA GGGTAAAGGG TGGGGTCCGT TGCCTTTCCA CCCTTCAAGT TCCTGCTCCG
AAGCATCCCT CCTCACCAGC TCAGAGCTCC CATCCTGCTG TAOCATATGG AATCTGCTCT TTTATGGAAT TTCT

```

FIG. 2D





**FIG. 3**

FIG. 4C

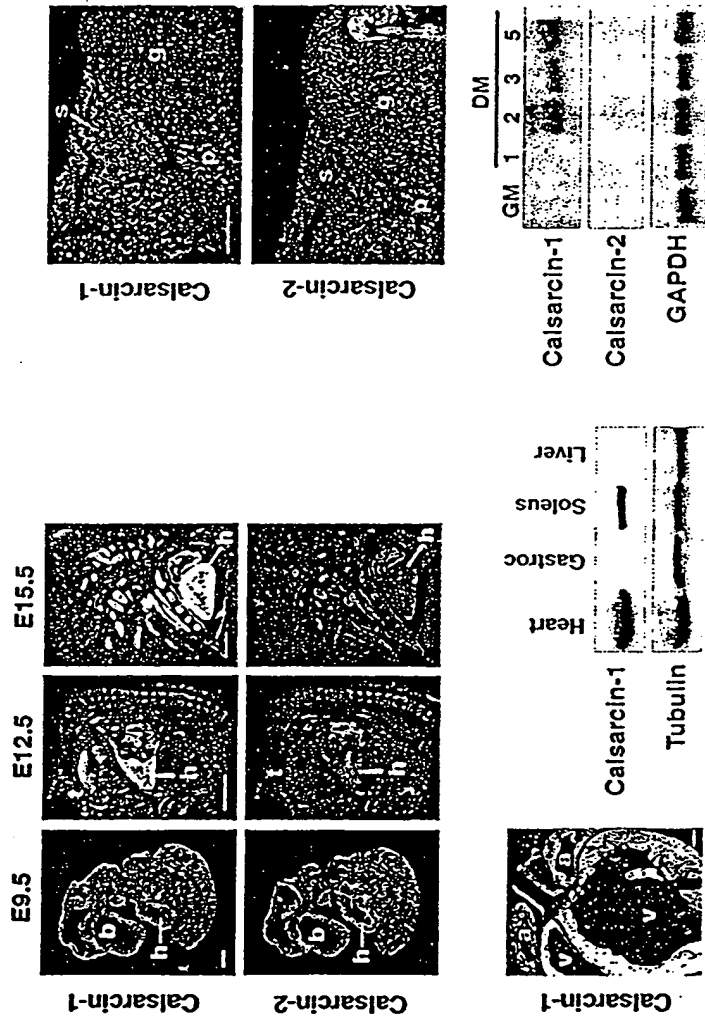


FIG. 4A

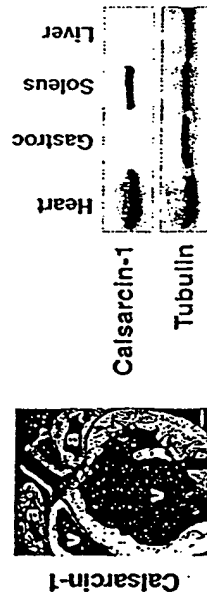


FIG. 4B

FIG. 4D

FIG. 4E

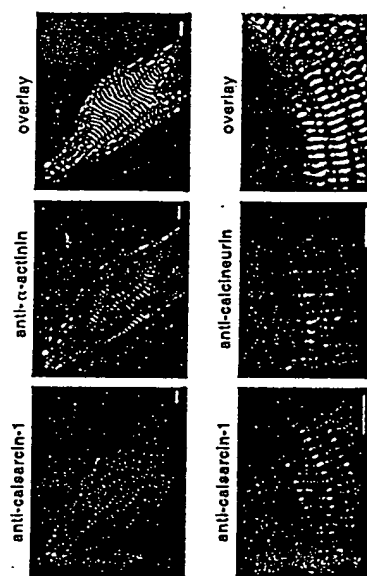


FIG. 5A

FIG. 5B

FIG. 6A

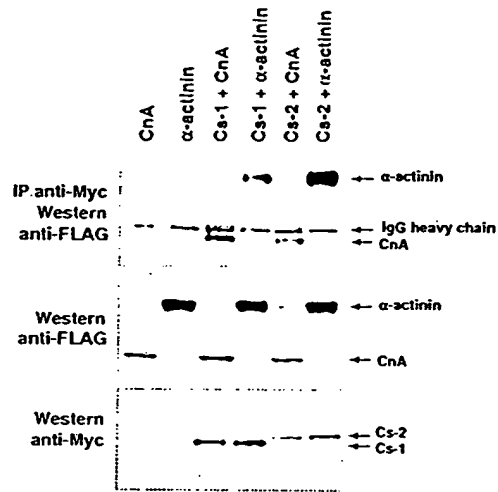


FIG. 6B

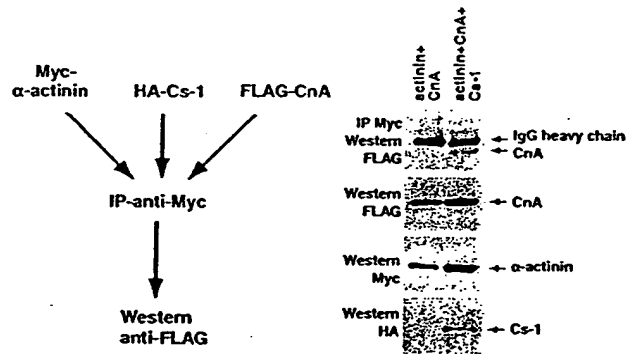
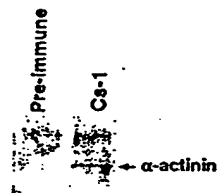


FIG. 6C





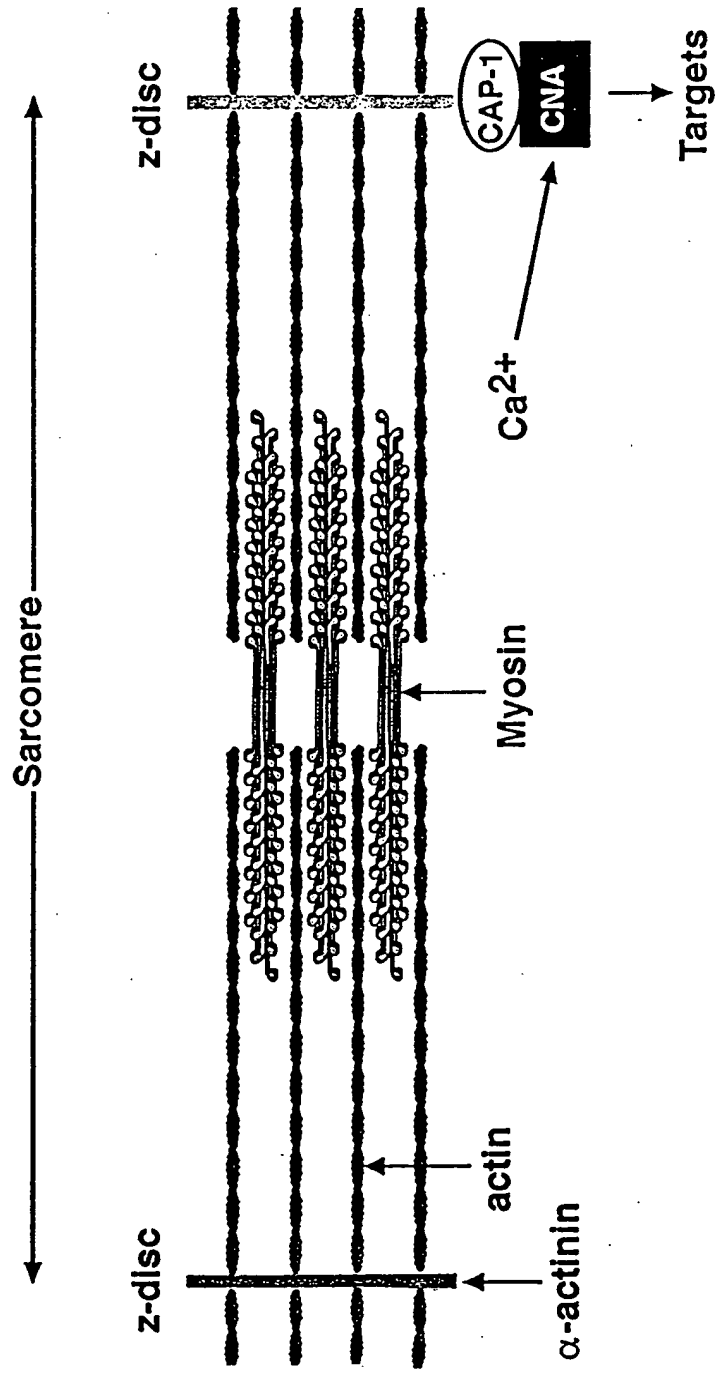


FIG. 8

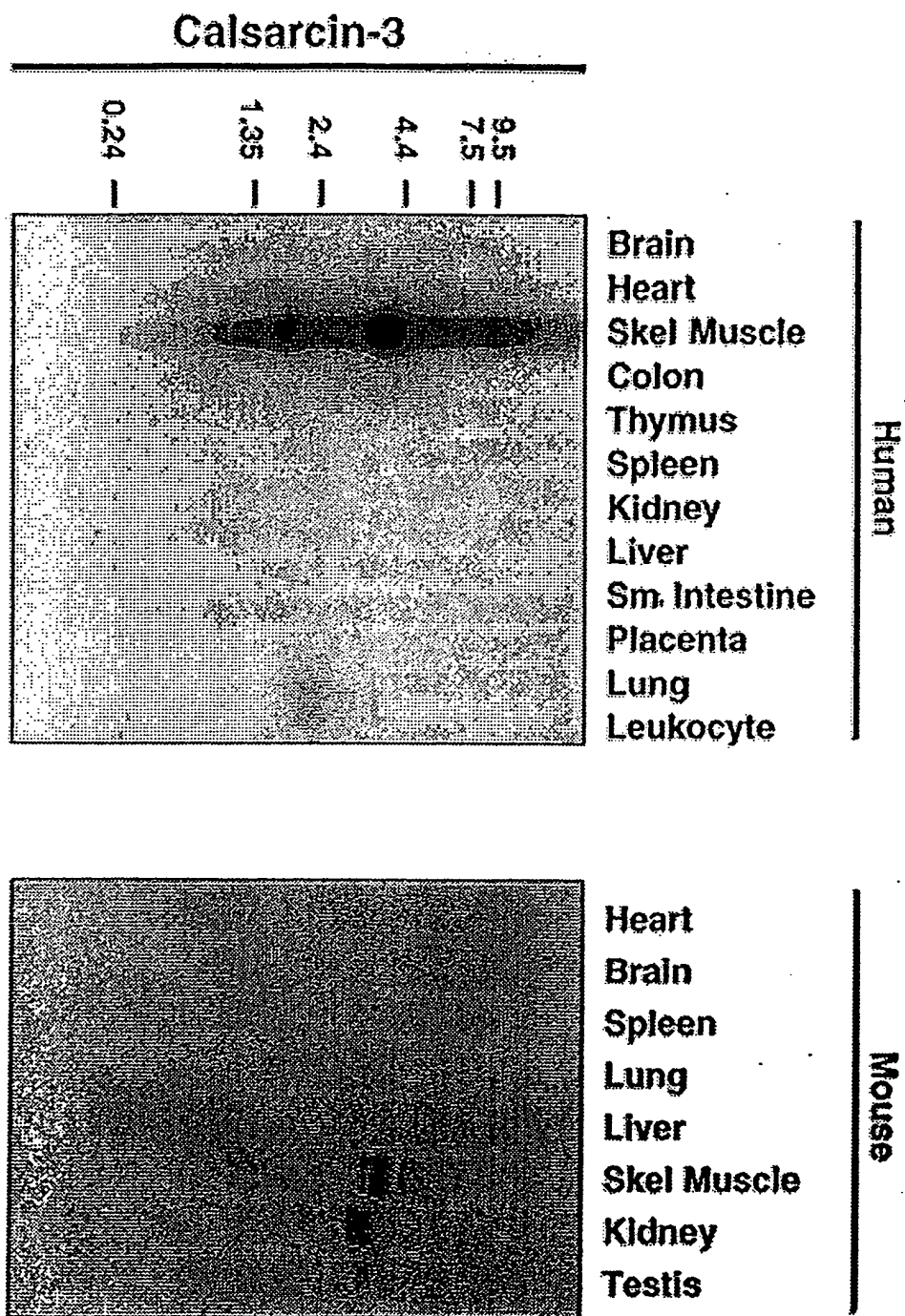


FIG. 9

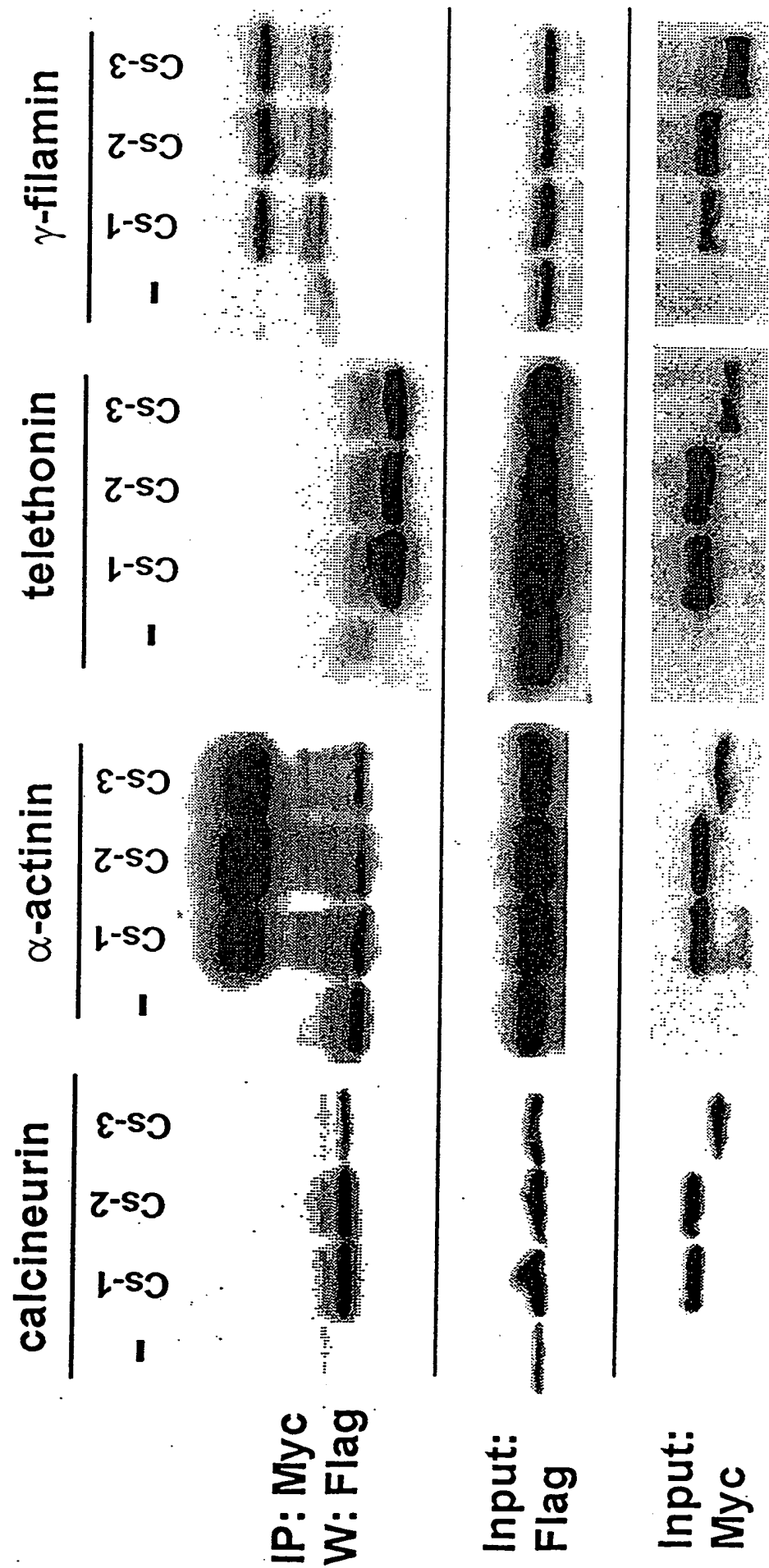


FIG. 10



calsarcin-3

actinin

merge

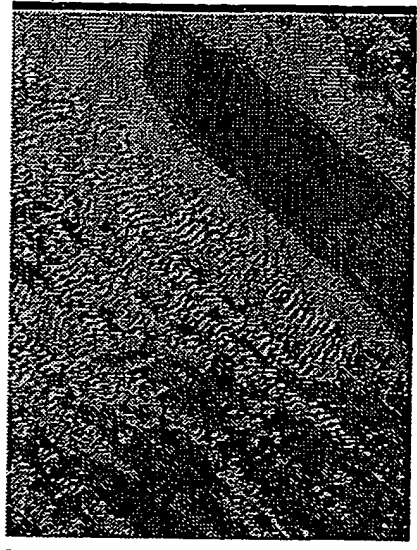
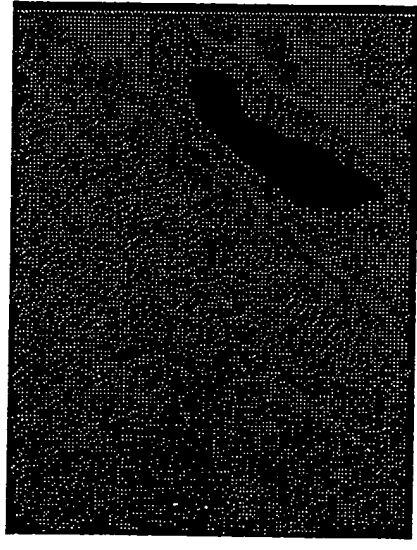
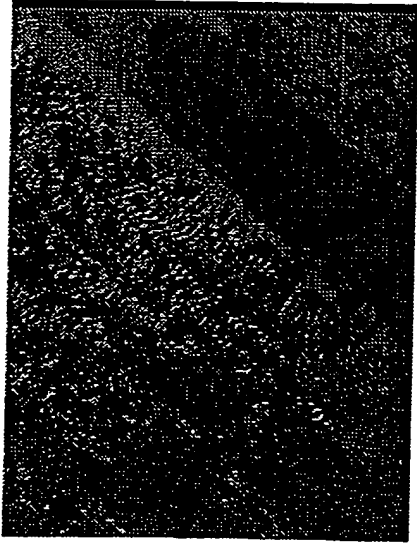
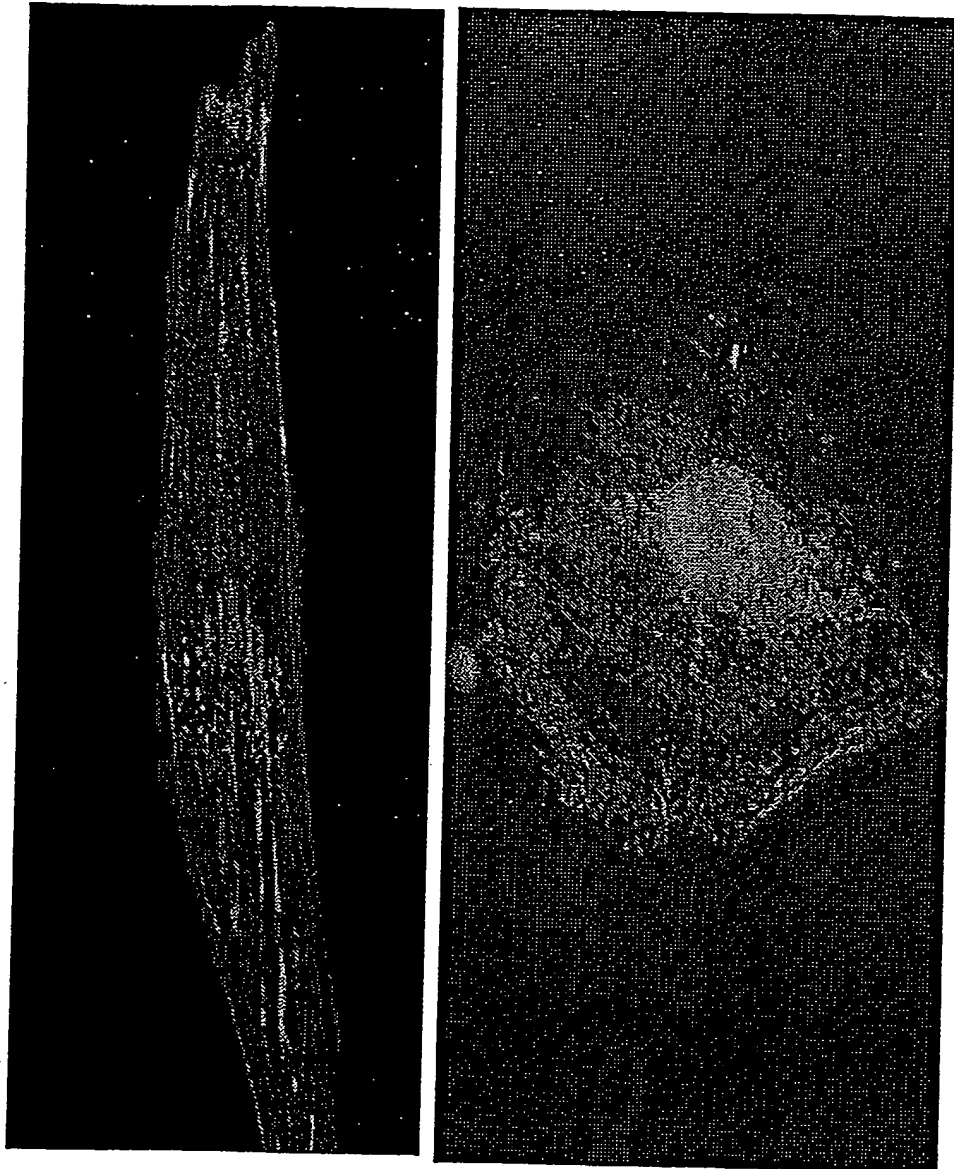


FIG. 11

**FIG. 12**



[illegible]

**FIG. 13**